



PROGRAM : BACCALAUREUS TECHNOLOGIAE
PODIATRY

SUBJECT : **PODIATRIC MEDICINE II**

CODE : **HPMA211**

DATE : NOVEMBER 2016 EXAMINATION

DURATION : 180 Minutes

WEIGHT : 50:50

TOTAL MARKS : 172

EXAMINER : MR. S NTULI

MODERATOR : MS. M PURBHOO

NUMBER OF PAGES : 4 PAGES INCLUDING THE COVER PAGE

INSTRUCTIONS

- PLEASE HAND BOTH YOUR QUESTION PAPER AND ANSWER SHEET TO THE INVIGILATOR
 - ANSWER ALL QUESTIONS.
 - WRITE NEATLY AND LEGIBLY MISSING A LINE SPACE BETWEEN QUESTIONS.
 - MARKS WILL BE ALLOCATED FOR A CLEAR AND LOGICAL EXPOSITION OF THE ANSWER.
 - NEGATIVE MARKING WILL BE USED FOR CONTRADICTING STATEMENTS/ FACTS
 - PLEASE HAND IN ALL QUESTION AND ANSWER PAPERS TO THE INVIGILATOR.
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QUESTION ONE

Section on Diabetic Foot complications

A Diabetic patient presents to you with a Charcot foot as depicted in the image below.



1.1 Discuss the Charcot foot under the following;

1.1.1 The three pathophysiology theories [3x5=15]

1.1.2 Clinical features of the acute Charcot foot [2x2=4]

1.1.3 Identify **four** differential diagnosis of the Charcot foot and explain how you could possibly rule out each differential diagnosis? [4x2=8]

1.1.4 Identify and discuss your key strategy in managing this patient. [6]

1.2 Diabetic Foot Ulcers are referred to as complex, chronic wounds, which have a major long-term impact on the morbidity, mortality and quality of patients' lives.

1.2.1 Identify and discuss the **four** most significant aetiological factors related to the development of foot ulcers in individuals with diabetes. [4x4=16]

1.2.2 In your own words explain how mechanical stress may lead to diabetic foot ulcers in patients with diabetes. [8]

1.2.3 Identify five factors that may delay wound healing in a diabetic foot, explain why you think each factor you've identified may cause delays in wound healing. [5x2=10]

[67]

QUESTION TWO

Section on Wounds and Principles of Wound Management

2.1 The Triangle of Wound Assessment identifies three distinct, yet interconnected, areas used in wound assessment. Identify and briefly explain what is assessed in each of the areas when using the triangle of wound assessment. [3x3=9]

2.2 Wound exudate is defined as fluid that has leaked out of blood vessels and closely resembles blood plasma. With this in mind, please do the following;

2.2.1 Explain what increased exudate production in a patient with a chronic venous leg ulcer may mean. [4x2=8]

2.2.2 Explain what you would consider when selecting wound dressing for a patient with an exudative wound/s. [4x2=8]

2.2.3 Explain how you would undertake an integrated exudate assessment in a patient with exudative wound. [6x3=18]

2.2.4 Identify and explain the three mechanisms by which Biofilms protect bacteria. [3x3=9]

[52]

QUESTION THREE

Section on Basic Pharmacology

3.1 Define the following terms; [5x2=12]

3.1.1 Pharmacokinetics [2]

3.1.2 Pharmacodynamics [2]

3.1.3 Absorption [2]

3.1.4 Distribution [2]

3.1.5 Metabolism [2]

3.1.6 Excretion [2]

3.2 Based on your understanding of pharmacokinetics, explain in your own words the connection between or significance of the following anatomical structures when prescribing medication/s to patients. [4x3=12]

3.2.1 Liver

3.2.2 Kidneys

3.2.3 Bowel

3.2.4 Impaired blood circulation

[24]

QUESTION 4

Ethics Section

Ethical theories attempt to provide an over-arching theoretical framework for addressing the problem of how human beings should behave with one another in the world.

4.1 Identify and explain the three main ethical theories. [3x3=9]

4.2 As a future clinician you are required to make ethical decisions when dealing with ethical dilemmas at all times. Discuss how **you** would use *Ethical Model for Decision Making* to arrive at a considered opinion and resolution when dealing with ethical dilemmas. [20]

[29]

Total Marks: 172